



# Cofilin (phospho Ser3) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-03011
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	CFL1
<b>Protein Name</b>	Cofilin-1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Cofilin around the phosphorylation site of Ser3. AA range:1-50
<b>Specificity</b>	Phospho-Cofilin (S3) Polyclonal Antibody detects endogenous levels of Cofilin protein only when phosphorylated at S3.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	CFL1; CFL; Cofilin-1; 18 kDa phosphoprotein; p18; Cofilin; non-muscle isoform
<b>Observed Band</b>	19kD
<b>Cell Pathway</b>	Nucleus matrix . Cytoplasm, cytoskeleton . Cell projection, ruffle membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell projection, lamellipodium membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell projection, lamellipodium . Cell projection, growth cone . Cell projection, axon . Colocalizes with the actin cytoskeleton in membrane ruffles and lamellipodia. Detected at the cleavage furrow and contractile ring during cytokinesis. Almost completely in nucleus in cells exposed to heat shock or 10% dimethyl sulfoxide.
<b>Tissue Specificity</b>	Widely distributed in various tissues.
<b>Function</b>	function:Controls reversibly actin polymerization and depolymerization in a pH-sensitive manner. It has the ability to bind G- and F-actin in a 1:1 ratio of cofilin to actin. It is the major component of intranuclear and cytoplasmic actin rods.,online information:Cofilin entry,PTM:Phosphorylated on Ser-3 in resting cells.,similarity:Belongs to the actin-binding proteins ADF family.,similarity:Contains 1 ADF-H domain.,subcellular location:Almost completely in nucleus in cells exposed to heat shock or 10% dimethyl sulfoxide.,tissue specificity:Widely distributed in various tissues.,


**Background**

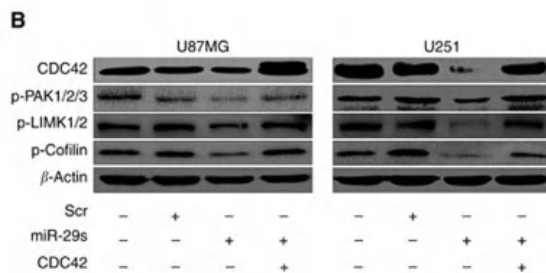
cofilin 1(CFL1) Homo sapiens The protein encoded by this gene can polymerize and depolymerize F-actin and G-actin in a pH-dependent manner. Increased phosphorylation of this protein by LIM kinase aids in Rho-induced reorganization of the actin cytoskeleton. Cofilin is a widely distributed intracellular actin-modulating protein that binds and depolymerizes filamentous F-actin and inhibits the polymerization of monomeric G-actin in a pH-dependent manner. It is involved in the translocation of actin-cofilin complex from cytoplasm to nucleus.[supplied by OMIM, Apr 2004],

**matters needing attention**

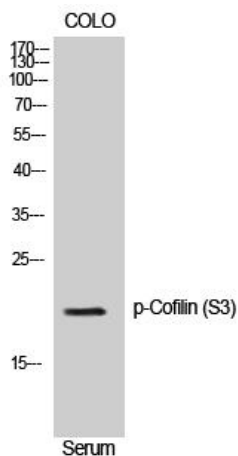
Avoid repeated freezing and thawing!

**Usage suggestions**

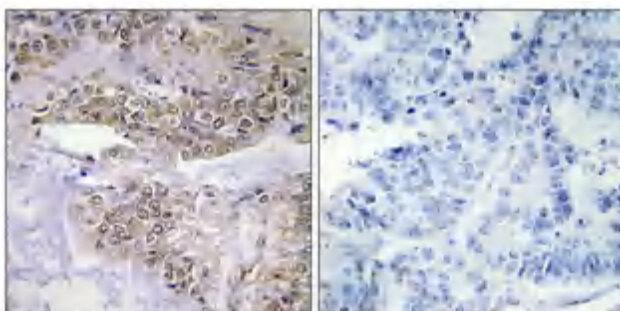
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**


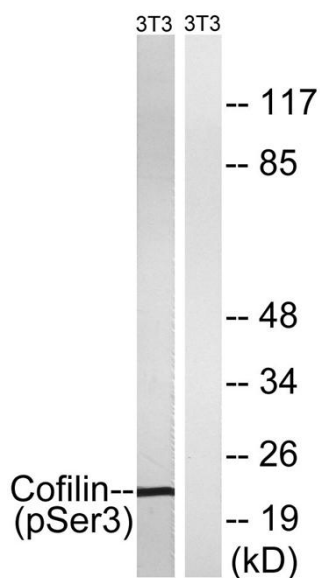
Shi, Cuijuan, et al. "miR-29a/b/c function as invasion suppressors for gliomas by targeting CDC42 and predict the prognosis of patients." *British Journal of Cancer* 117.7 (2017): 1036.



Western Blot analysis of NIH-3T3 cells using Phospho-Cofilin (S3) Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Western blot analysis of lysates from NIH/3T3 cells treated with paclitaxel 1uM 24hours, using Cofilin (Phospho-Ser3) Antibody. The lane on the right is blocked with the phospho peptide.